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Patent
Attorney's Docket No. LSCP1022MAH

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of
Inventor: Russell Pon
Application No.: 08/086,014
Filed: July 2, 1993
For: PROBE HAVING OPTICAL FIBER
FOR Laterally Directing
LASER BEAM

Group Art Unit: 2501
Examiner: Unassigned

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By: Cecilia A. Maida (Signature)
Cecilia A. Maida (Type Name)
Signature Date: 10/22/93

10/19/93
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INFORMATION DISCLOSURE STATEMENT
BEFORE FIRST OFFICE ACTION

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

Enclosed please find a Form PTO-1449 listing prior art for consideration by the Examiner in the above-identified U.S. patent application, and copies of the cited references. This Information Disclosure Statement is filed prior to the First Office Action, and therefore, no fee is required.

The Examiner's attention is drawn to the translation of Japanese Kokai Patent Application No. 61-219904 invented by Abe, et al. In particular, at page 6, dimensions of the diameter of the fiber conductor are recited as a core size of 400 microns with an outer diameter of the cladding of 650 microns. On first pass, it would appear to describe a system that satisfies the relation in Claim 2, for instance, in the present application in which the outside diameter of the "core cladding layer" is greater than about 1.4 times the outside radius of core. However, in the Japanese reference, the dimensions of the cladding layer are believed to refer to the entire cladding structure, including the so-called primary coating layer 12 and protective coating pipe 13. However, it is the position of the inventor in the present application that

had these numbers referred to the fiber core and the core cladding layer alone as claimed in the present invention, the problem of misdirected energy which the Japanese reference seeks to solve would not have occurred. Therefore, it is believed that this Japanese reference does not teach the present invention.

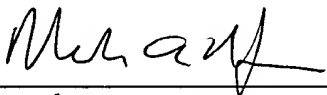
These dimensions also appear on page 9 of the Japanese Kokoku Patent No. 3-63377 which is enclosed. It is believed that these numbers in the Japanese translations not teach the features described and claimed in the present invention. Indeed, the elaborate techniques used in these references to minimize the damage done by misdirecting energy by the lateral beam directing fiber tips described in those applications establish that they did not use a core cladding layer to core ratio taught by the present invention.

There are a number of other references attached which address the issue of laterally directing a laser beam. However, none are believed to suggest the present invention.

Prosecution of the course of the present application is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. § 1.17 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 08-1405. This paper is submitted in duplicate.

Respectfully submitted,

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Date: October 22, 1993